

## Ergonomics demonstration project: Residential Care

### Need

The residential-care industry is one of the 12 highest-risk industries in Washington State for Work-Related Musculoskeletal Disorders (WMSDs). Employers range from institutions for the mentally and developmentally disabled, to residential-care homes such as adult family homes, group homes, children's homes and institutions for the blind.

Rainier School is a Department of Social and Human Services (DSHS) facility and is the largest employer in this industry group. It is a state residential-care facility for approximately 420 mentally and developmentally disabled residents. Historically, the Rainier School has had the highest number of WMSDs in this industry group each year. Department of Labor and Industries ergonomists contacted DSHS safety personnel about developing a demonstration project to help Rainier School to comply with the ergonomics rule. DSHS and Rainier School safety personnel believed the greatest ergonomic risk exposure to their workforce was due to client lifting.

### Goals

- Evaluate jobs in two to three resident houses with the highest demand for client lifting. Determine caution zone jobs and analyze for hazards if indicated.
- Evaluate work practices and controls since implementing a two-person lifting policy and introducing modern lifting equipment to determine their effectiveness in reducing ergonomic risk or WMSD's.
- Compare Rainier School lifting policy and practices with a similar DSHS facility.
- With employee input, compile a booklet with control recommendations to share best/acceptable practices with the industry and similar workplaces.

### Project design

Staff believed it necessary to have an introductory observation time with the staff and residents to ensure their acceptance of outsiders' presence and involvement before proceeding with a project plan. L&I ergonomists introduced themselves and the proposed project to the staffs of two resident houses and observed the major work duties during day and evening shifts.

Based on two days of observations of the work, we found that employees used modern lift devices and did not have exposures to ergonomic risk factors that reached the caution zone levels. (Certainly, employees work with awkward back postures and still perform manual handling activities with clients, but with exposure levels below the caution zone limits as determined by the ergonomics rule.) Because of these findings the project is focusing on describing the controls and work practices that have reduced the exposure risk. L&I will develop an inventory of best practices for client handling and organize this information to produce a booklet of best practices to be shared with the rest of the industry.

## Timetable

April 2001 .....	Preliminary discussions with DSHS safety staff and initial meeting with Rainier School management and safety personnel
June 2001 .....	Conducted introductory meetings with residential house staff, informal observation of workers and clients of two resident houses
October 2001.....	Complete analysis of WMSD claims information
December 2001 .....	Meet with key personnel at a similar DSHS facility (Fircrest School), arrange for observation of work activities at this site, and review lifting program and controls at this site.
February 2002 .....	Complete picture-taking/video as needed to complete project, compile a best practices booklet for residential-care facilities.

## Results

- The demonstration project will show controls that are an effective way to reduce WMSDs in workplaces that provide direct physical care to clients in residential-care facilities.
- A best practices booklet will be compiled with employee involvement to be shared with industry. It will be beneficial to other employers who provide a similar degree of direct patient-care handling like nursing homes, hospitals, etc.
- Pictures and video of best practice methods for client lifting/transfers may be available on the L&I ergonomics web site.